algorithm on a data train completing a convolution-encoding process. The apparatus includes a computation device for performing a trellis computation for decoding a data train completing the convolution-encoding process. The decoding apparatus further includes a control device for controlling the trellis computation to be carried out by the computation device with processing timings in processing units each corresponding to a process carried out on n bits of pre-encoding data, in which each of the processing units is parallel processing carried out on computation results obtained for 2^n states with one of the processing timings immediately preceding a present one of the processing timings to find the computation results with the present processing timing for the 2^n states.--

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IN THE CLAIMS

Please amend claims 1-8 by rewriting same to read as follows:

--1. (Amended) A decoding apparatus for performing a maximum-likelihood decoding process based on a Viterbi algorithm on a data train completing a convolution-encoding process, said decoding apparatus comprising:

computation means for performing a trellis computation for decoding said data train completing said convolution-encoding process; and

control means for controlling said trellis computation to

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